

ABSTRACT

An oscillator circuit comprises a plurality of ring oscillators wherein each ring oscillator produces an oscillatory output signal. The ring oscillators are cross-coupled such that each ring oscillator drives only one other ring oscillator. In at least one embodiment, the oscillator circuit comprises four, three-stage ring oscillators. As such, each ring oscillator comprising three cells (e.g., inverters or delay elements). Further, in this embodiment, the oscillator circuit produces a four phase clock comprising the oscillatory output signals from each of the four ring oscillators.